

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of HOUR OF HARVEST, INC., licensee of WLJC-DT, Channel 7 in Beattyville, Kentucky, in support of its Application for Construction Permit to operate with an increase in effective radiated power and a change from an omnidirectional antenna to a directional antenna. No change in site location or antenna height is proposed herein.

It is proposed to utilize the present Dielectric antenna as a directional antenna. It is currently mounted at the 296-meter level of the existing 305-meter structure. Exhibit B provides azimuth and elevation patterns for the proposed antenna. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 43 dBu service contour. An interference study is included in Exhibit D, and it is important to note that the study utilized a cell size of 1.0 kilometer and an increment spacing of 0.1 kilometers. A power density calculation is provided in Exhibit E.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the WLJC-DT site. However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

Since no change in overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. The Commission has assigned Antenna Structure Registration Number 1227743 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.



KEVIN T. FISHER

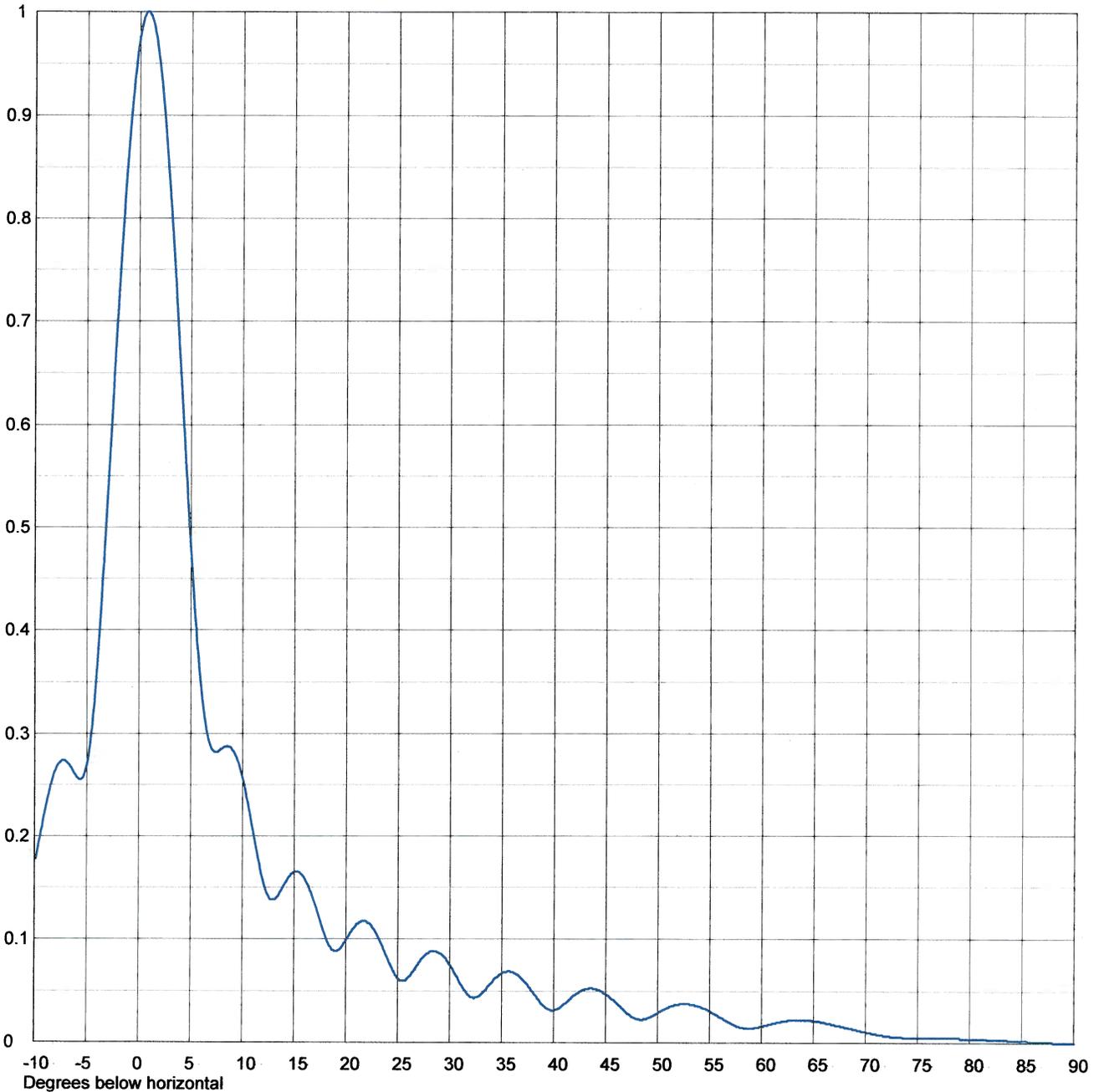
September 29, 2011



EXHIBIT B-1
ANTENNA ELEVATION PATTERN
PROPOSED WLJC-TV
CHANNEL 7 – BEATTYVILLE, KENTUCKY
SMITH AND FISHER

ELEVATION PATTERN

RMS Gain at Main Lobe	9.0 (9.54 dB)	Beam Tilt	0.75 Degrees
RMS Gain at Horizontal	8.6 (9.34 dB)	Frequency	177.00 MHz
Calculated / Measured	Calculated	Drawing #	19W090075-90



Remarks:



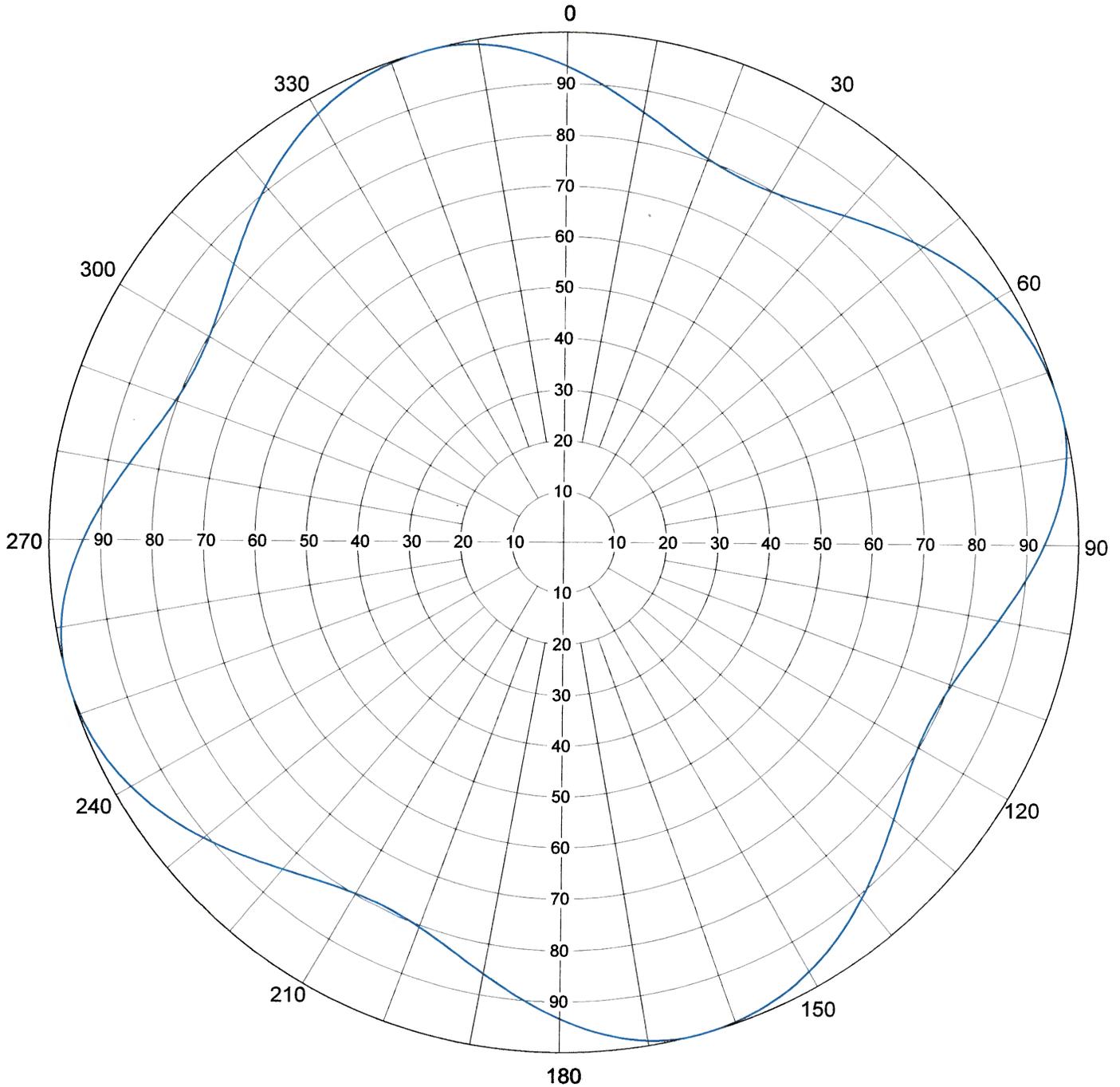
EXHIBIT B-2
ANTENNA AZIMUTH PATTERN
PROPOSED WLJC-TV
CHANNEL 7 – BEATTYVILLE, KENTUCKY
SMITH AND FISHER

AZIMUTH PATTERN

Gain
Calculated / Measured

1.20 (0.79 dB)
Calculated

Frequency **177 MHz**



Remarks:



CONTOUR POPULATION
36 DBU : 1,263,713
43 DBU : 990,079

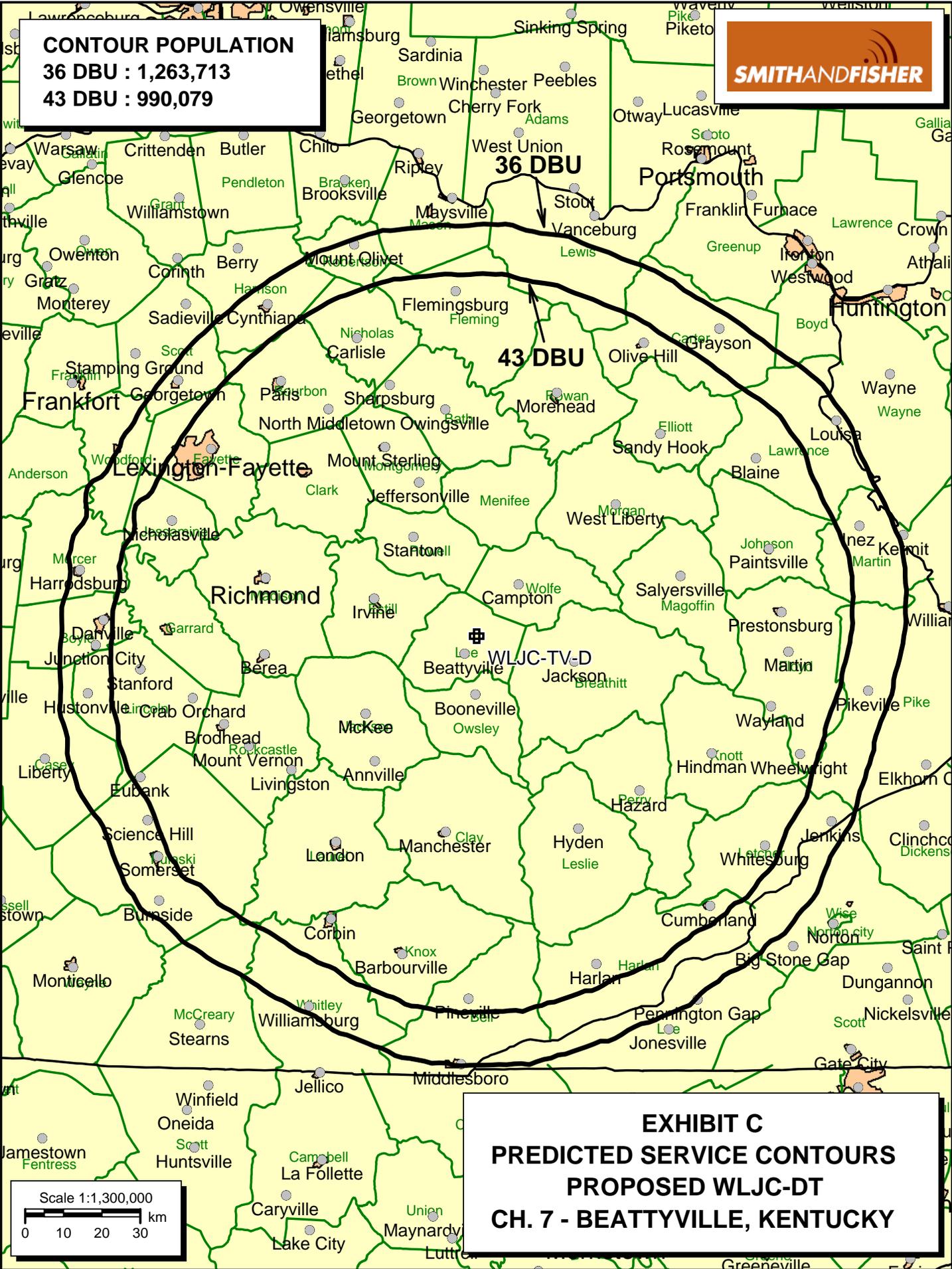
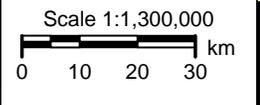


EXHIBIT C
PREDICTED SERVICE CONTOURS
PROPOSED WLJC-DT
CH. 7 - BEATTYVILLE, KENTUCKY



INTERFERENCE STUDY
PROPOSED WLJC-DT
CHANNEL 7 – BEATTYVILLE, KENTUCKY

The instant application specifies an ERP of 88 kw (directional) at 321 meters above average terrain, which we have determined to be allowable under the FCC's interference standards with respect to various post-transition digital television facilities.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "SunDTV" computer program, which mimics the FCC's program. In conducting our studies, we employed a cell size of 1.0 kilometer and an increment spacing of 0.1 kilometer along each radial. In addition, we utilized the 2000 U.S. Census. The summary results of that study appear in Exhibit D-2.

As shown, the proposed WLJC-DT facility would not contribute more than 0.5% interference (beyond that which is caused by the allotted WLJC-DT facility) to the service population of any potentially affected post-transition DTV station.

A Longley-Rice interference study also reveals that the proposed WLJC-DT facility does not cause significant (0.5%) interference within the protected service contour of any potentially affected Class A low power television station.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

EXHIBIT D-2

LONGLEY-RICE INTERFERENCE STUDY RESULTS

PROPOSED WLJC-DT
CHANNEL 7 – BEATTYVILLE, KENTUCKY

WLJC_DT_DA_ROT_summary.txt
Summary Study

Percent allowed new interference: 0.500
 Percent allowed new interference to non Class A LPTV: 2.000
 Census data selected 2000
 Data Base Selected
 ./data_files/pt_tvdb.sff

WARNING WARNING WARNING

The following list of station records has been excluded from the analysis due to the fact that they have the same state, city and channel as the proposed station - This could cause the program to not find a potential fail situation

You can force the program to include these records by setting the state of the proposed record to ZZ and re-running the analysis

WLJC-TV 07 BEATTYVILLE KY BLCDT 20090220ACR

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 09-28-2011 Time: 13:18:36

Record Selected for Analysis

WLJC-TV- USERRECORD-01 BEATTYVILLE KY US
 Channel 07 ERP 88. kW HAAT 308. m RCAMSL 00595 m
 Latitude 037-36-47 Longitude 0083-40-18
 Status APP Zone 2 Border Site number: 01
 Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 75.
 Last update Cutoff date Docket
 Comments
 Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 0.10 km

Facility (site # 01) meets maximum height/power limits

Site number	ERP	HAAT	36.0 dBu F(50, 90)
(Deg)	(kW)	(m)	(km)
0.0	78.420	266.7	107.3
45.0	62.093	302.1	107.4
90.0	78.420	320.5	111.0
135.0	62.093	345.9	110.9
180.0	78.420	328.0	111.6
225.0	62.093	337.0	110.2
270.0	78.420	281.4	108.1
315.0	62.093	284.6	106.3

No Spacing violations or contour overlap
to Class A stations from site # 01

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

WLJC-TV- 07 BEATTYVILLE KY USERRECORD01 Site # 01

and station

SHORT TO: WLJC-TV 07 BEATTYVILLE KY DTVP LN DTVP0064
37 -36-47 83 -40-18
Req. separation 273.6 Actual separation 0.0 Short 273.6 km

SHORT TO: WMAK 07 KNOXVILLE TN BLC DT 20040810ABE
036-00-36 0083-55-57
Req. separation 273.6 Actual separation 179.4 Short 94.2 km

Checks to Site Number 01

- Proposed facility OK to FCC Monitoring Stations
- Proposed facility OK toward West Virginia quiet zone
- Proposed facility OK toward Table Mountain
- Proposed facility is beyond the Canadian coordination distance
- Proposed facility is beyond the Mexican coordination distance
- Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station	ARN
07	Call City/State WLJC-TV- BEATTYVILLE KY	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WEHT	EVANSVILLE IN	343.6	LIC	BLC DT	20090928AKE
07	WSPA-TV	SPARTANBURG SC	298.3	LIC	BLC DT	20090918ACF
07	WMAK	KNOXVILLE TN	179.7	LIC	BLC DT	20040810ABE
07	WTRF-TV	WHEELING WV	371.4	CP MOD	BMP CD T	20080620ALK
08	WBNA	LOUISVILLE KY	188.7	LIC	BLC DT	20021024AAB

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED WLJC-DT
CHANNEL 7 – BEATTYVILLE, KENTUCKY

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Beattyville facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 88 kw, an antenna radiation center 296 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of 0.000070 mw/cm^2 is calculated to occur 1,856 meters from the base of the tower. Since this is less than 0.1 percent of the 0.2 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 7 (174-180 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.